

December 2, 2015



U.S. Department  
of Transportation

East Building, PHH-30  
1200 New Jersey Avenue S.E.  
Washington, D.C. 20590

**Pipeline and Hazardous  
Materials Safety Administration**

DOT-SP 6530  
(SIXTEENTH REVISION)

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: (See individual authorization letter)
2. PURPOSE AND LIMITATION:
  - a. This special permit authorizes the transportation in commerce of hydrogen or deuterium, and mixtures of hydrogen or deuterium with helium, argon or nitrogen in certain specification cylinders filled to 110 percent of their marked service pressures. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
  - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
  - c. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.302a(b) in that flammable gases are not authorized for special filling limits in DOT specification cylinders, except as specified herein.
5. BASIS: This special permit is based on the application of Linde Gas North America, LLC dated September 23, 2015 submitted in accordance with § 107.105 and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Compressed gas, n.o.s. (mixtures containing hydrogen)	2.2	UN1956	N/A
Compressed gas, flammable, n.o.s.	2.1	UN1954	N/A
Hydrogen, compressed	2.1	UN1049	N/A
Deuterium, compressed	2.1	UN1957	N/A
Compressed gas, n.o.s. (mixtures containing deuterium)	2.2	UN1956	N/A

7. SAFETY CONTROL MEASURES: Prescribed packagings are DOT Specification 3A, 3AA, 3AX or 3AAX steel cylinders, manufactured after December 31, 1945, that are filled to 110% of their marked service pressure. Cylinders must conform to the conditions prescribed in § 173.302a(b) and the following:

- a. DOT Specification 3A and 3AX cylinders are limited to those having an intermediate manganese steel composition.
- b. Cylinders manufactured from intermediate manganese steel must have been normalized, not quenched and tempered. Quench and temper treatment of intermediate manganese steel is not authorized.
- c. Cylinders from chrome moly steel must have been quenched and tempered, not normalized. Use of normalized chrome moly cylinders is not permitted.

8. SPECIAL PROVISIONS:

- a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or

change is made to the package and it is reoffered for transportation in conformance with this special permit and the HMR.

b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

c. Cylinders must be equipped with safety relief devices as follows:

(1) Cylinders less than 65 inches in length must be equipped with fusible metal backed frangible disc devices.

(2) Cylinders 65 inches or greater in length and 9-5/8 inches in diameter or larger must be equipped with fusible metal backed frangible disc devices or frangible disc devices except cylinders having diameter of 22 inches or larger must be equipped with frangible disc devices.

d. Each cylinder or manifolded group of cylinders must be conspicuously marked "DOT-SP 6530." Tube-trailers must have this marking displayed on the right side, near the front, in letters not less than 2 inches high on a contrasting background.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, and cargo vessel.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel used to transport packages covered by this special permit.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
  - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Persons operating under the terms of this special permit must comply with the security plan requirement

in Subpart I of Part 172 of the HMR, when applicable.

- o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when the special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- "The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for Dr. Magdy El-Sibaie  
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building

PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C.  
20590.

Copies of this special permit may be obtained by accessing the  
Hazardous Materials Safety Homepage at

[http://hazmat.dot.gov/sp\\_app/special\\_permits/spec\\_perm\\_index.htm](http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm)

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PO:RS/SG